SCIENTIFIC REVIEWS

Violeta Šiljak*
Dorđe Stefanović**
Elena Plakona***
Goran Kasum**
Nađa Avdibašić - Vukadinović****

796.032.2-056.26 Scientific review

- * Faculty of Sport Menagment, ALFAUniversity
- ** Faculty of Sport and Physical Education, University of Belgrade
- *** EPAS High School, Edesa
- **** Faculty of Physical Education and Sport, University of Tuzla

SUMMER PARALYMPIC GAMES PHENOMENON

Abstract

The phenomenon of Summer Paralympic Games was discussed in this paper from scientific/theoretical and practical aspect. In order to understand the interpretation of axiological aspect of Summer Paralympic Games, we briefly presented: occurrence and development retrospective, Paralympic movement in the world and here, taxonomy of competition skills, some past researches, as well as critical comment on the existing problems. This paper's mission is to point to the necessity to incorporate the young into the values of Paralympic Games, to develop curiosity sense in the researchers, to involve the media and the society more, and all that for the development of Paraolympic sport.

Key words: SPORT / PARALYMPIC GAMES / AXIOLOGICAL ASPECTS

INTRODUCTION

Diverse scientific-research and practical work of several generations of experts have led to forming a complex and integral system of knowledge from the field of Paralympic Games. Great polymorphic development of the phenomenon Paralympic Games in time, educational and scientific coherence, problems in relation science/theory – practice, existing socio-political ideologies etc. have influenced the fact that today people in the world are educated and accept the values of both Olympic Games (OG) and Paralympic Games (PG). Former motto of International paralympic Committee – 'Enable Paralympic athletes to achieve success in sport, inspiration and

excitement of the world', is substituted by a new one – 'Spirit in motion'.

SUBJECT AND GOAL OF THE RESEARCH

The subject of this research is studying anthropological socio-historical phenomenon of PG. The function of our task was not to justify the existing sports phenomenon, it did not have a therapeutic function, but its function was to find phenomena that it would critically explore (e.g. critical thought will help to remove negative tendencies of a sport event),

to clarify, analyse and put it all into the scope of dialectic unity of theory and practice.

The goal of the research is to, through considering more aspects of PG, affect the development of scientific thought from this sport area as well, which would mostly affect the interest and the improvement of quality of preparation technology and the training conditions of persons with disabilities, as well as the improvement of the professional staff.

WORK METHOD

Principle methods used in this work are *theo*retic analysis method and historical method.

THE VALUES OF PARALYMPIC GAMES

Phenomenology as a philosophic discipline about phenomena, in our case the phenomenon of PG, has essential meaning for sport. Sport phenomenology has its primary task to discover what is essential, for example in the process of sport training and competition of persons with disabilities, which are directly shown as phenomena. The commitment for studying this phenomenon is by all means a challenge for a researcher. Challenge, first of all, because of the fact that the problem can be studied more profoundly, so searching for new information is a pleasure. However, on the other hand, it is also an obligation of the researcher to contribute to the development of paralympic sport from scientific-theoretical aspect. Polymorphic character of PG phenomenon, a sports act, social politics etc. seek for constant criticism, theoretic alteration (addition). This is where the sport philosophy offers wise, sensible critical thoughts that are aimed towards the prosperity of the PG. In order to understand the issues of scientific research work better, it is necessary to become familiar with the values of PG phenomenon through brief historical retrospective.

Brief historical retrospective of occurrence and development of PG

The first sportsman with disability that competed at the OG before the PG appeared was a Hun-

garian Karoly Takacs. He competed in shooting in 1948 and 1952. He did not have right arm.

The second competitor in equestrian events was Liz Hartel, a Danish woman that was paralysed by polio and still won the silver medal.

The first organized athlete event for the persons with disabilities was held the same year as the OG in London in 1948.

The creator of the PG was Dr Ludwig Guttmann, who organized sports event for the veterans of the Second World War in a place called Stoke Mandeville in England. Sixteen members of British Armed Forces participated on the hospital courts (14 men and 2 women). It was a public demonstration that proved that persons with body disabilities can practise sport. In 1952 the paraplegic from the Netherlands joined the British and from that time on they meet every year at the end of August on the court of Stoke Mandeville. The number of participants grew every year (Flander 1975).

The first PG were held in 1960 in Rome where they got their title Paralympic Games. The word paralympic comes from Greek word $\pi\alpha\rho\dot{\alpha}$ -beside, for, and this means that PG take place directly after OG. In Rome, competitions were held in six disciplines: athletics, swimming, basketball, table tennis, fencing and archery.

At the PG in Torino in 1976 sportsmen with body disability joined other groups of persons with disability which enlarged the movement. That way the idea of including different types of disabilities in this international movement was created.

The PG are held the same year as the OG. From the Summer Games in 1988 in Seoul, and the Winter Games in 1992 in Albertville, they are being held at the same place, two weeks after the OG.

The PG have developed considerably in the period of last half a century. The number of participants was constantly growing – from 400 contestants from 23 countries in 6 disciplines in Rome in 1960, to over 4200 contestants from 148 countries on PG in Beijing in 2008, who competed in 19 disciplines. That way PG movement grew considerably. In table 1 host countries and years of Summer PG are shown.

Table 1 Host countries	and vears	when Summer	PG took place
------------------------	-----------	-------------	---------------

No	Year	City	Country
1.	1960	Roma	Italy
2.	1964.	Tokio	Japan
3.	1968.	Tel Aviv	Israel
4.	1972.	Heidelberg	Germany
5.	1976.	Toronto	Canada
6.	1980.	Arnhem	Holland
7.	1984.	Stouk Mendevil New York	GB USA
8.	1988.	Seul	South Korea
9	1992.	Barcelona	Spain
10.	1996.	Atlanta	USA
11.	2000.	Sidney	Australia
12	2004.	Athens	Greece
13	2008.	Bejing	China

Paralympic movement in the world

International Sport Organization for the Disabled (*ISOD*), founded in 1964, was the first organization dedicated to improving sports possibilities for persons with disabilities. The founders of the organization were the managing body of International Olympic Committee (*IOC*) for OG. In 1982 it got a new name – International Coordinating Committee Sports for the Disabled in the World (*ICC*). Successful cooperation of *IOC* and *ICC* resulted in carrying out Summer PG in 1988 in Seoul.

ICC grew by including not small number of countries and sportsmen in the sports programme of PG competition. This body was reorganized under new name – International Paralympic Committee (*IPC*) in 1989.

IPC is a global managing body of the Paralympic movement whose most important body is the Assembly. It chooses Managing board of 15 members who lead the organization between the meetings of the Assembly. It consists of 165 National Paralympic Committees (*NPC*).

Representatives of 165 countries from the following structures are present in *NPC* Assembly:

- 1) International sports organizations:
 - International Federation for Equestrian Sport (FEI);
 - International Wheelchair Basketball Federation (IWBF);
 - International Tennis Federation (*ITF*);
 - International Association for Disabled Sailing (IFDS);
 - International Organization of Volleyball for people with disabilities (*WOVD*) and
 - World Curling Federation (*WCF*).
- 2) International sports organizations for persons with disabilities:
 - Cerebral Palsy International Sports and Recreation Association (*CP-ISRA*);
 - International Blind Sports Organization (*IBSA*);
 - International Sports Federation for Persons with Intellectual Disabilities (*INAS-FID*) and
 - International Wheelchair & Amputee Sports Federation (*IWAS*);
- 3) Representatives of regional sports organizations:
 - African Sports Confederation of Disabled (ASCOD);
 - European Paralympic Committee (EPC) and
 - Oceania Paralympic Committee (*OPC*).

The *IPC* also founded the regional Paralympic Committees for America and Asia, which represent it in these continents.

The President of International Paralympic Committee is Philip Craven from Great Britain with headquarters in Bon (Germany). He is also a member of *IOC*.

The *IPC* is responsible for organisation of Summer and Winter Olympic Games. It supervises and coordinates the World Championships and other competitions and wants to create the possibility for all persons with disabilities to participate in sports events. It is also responsible for the implementation of legal acts for Paralympic movement. It closely cooperates with the *IOC*. The *IPC* delegates are also members of the *IOC* and they also participate in boards and commissions. Regardless of the close cooperation, the two managing boards remain separated with separate games.

Paralympic Movement in Serbia

Paralympic movement was founded in Serbia in 1944. Sport and body exercises are long known as a mean of healing. After the Second World War, the Fighters Organizations and War Military Invalids Associations were created here as well. Having noticed the importance of sport in enabling the disabled a quality life they started participating in international competitions as well. As the time passed, the conditions were made for the forming of Disabled Sport and Recreation Association in the republics. Thus in 1966 the Disabled Sport and Recreation Association of Yugoslavia was formed. The task of this Association was to coordinate the work, to give professional help, to mediate in the exchange of experience between the republics' associations, to train and affirm the disabled, to help them integrate into normal life and life courses through body activities. In 1988 there were 142 sports-recreational organizations in the SFRY with over 40,000 disabled persons who practised sports. When Yugoslavia disintegrate the Disabled Sport and Recreation Association of Yugoslavia was cancelled. The Disabled Sport and Recreation Association of Montenegro, the Sports Association of Serbia and Disabled Sports Association of Vojvodina were made, which were, by a new Law on Sport reregistered in 1988 into Ministry of Youth and Sport of the Republic of Serbia. Sport and Recreation Association of Montenegro and Disabled Sports Association of Vojvodina have been existing since 2006.

The Paralympic Committee of Yugoslavia was founded in 1999, but as the country's name changed so did the name of this Committee, and finally it got the name of the Paralympic Committee of Serbia (PCS) at the Assembly meeting on 5th July 2006.

The PCS is a *IPC*.member Primary function of this Committee is realisation of programme activities connected to the elite sport of persons with disabilities.

The most important PCS body is the Assembly that appoints the President and Secretary General. The other most important bodies are managing board, supervising board and sports commission which consists of professional council and council of athletes.

Members of the Assembly are citizens associations, sports associations of persons with disabilities and individuals. Clubs can attend the Assembly meetings and participate in debates, but they have no right to vote.

The sports represente in the PCS are the following: track and field athletics, table tennis, shooting, swimming, sitting volleyball, wheelchair basketball, wheelchair dancing, cycling, global, judo, skiing and equestrian sports.

The PCS program implies carrying out competition preparations, as well as participating on regional international competitions for the purpose of meeting norms for going to the PG, World and European Championships.

Paralympic games

The PG are sports planet event with the contestants divided into six groups according to types of disabilities:

- amputee persons who completely or partially lost at least one limb;
- cerebral paraplegic;
- blind and visually impaired with damaged eye sight, from partial damage to complete blindness;
- persons with intellectual disability;
- persons with injuries of spinal chord, who have to compete in wheelchairs and
- persons who do not fall under any of the

abovementioned groups (*les autres*) – like persons of short stature or persons suffering from multiple sclerosis.

The PG have its logo (Figure 1). It consists of three elements in red, blue and green. These are the colours that are mostly represented on flags around the world. The shape of the three elements symbolizes the vision of the *IOC*; universe character of Paralympic movement is embodied in round shape of the logo.



Figure 1. Logo of the Paralympic Games

The PG Opening ceremony is the same as the OG opening ceremony as set out at the 1920 OI ceremony in Antwerp. The ceremony begins with raising the host flag and playing the anthem. The anthem of the Paralympic Games is 'Anthem of the Future' and it was adopted in March 1996. The host country organizes an art programme, music, dancing, by which it represents its culture. After that, the games participants enter the stadium, in alphabetic order. The last to enter are the sportsmen of the host country. At the end Paralympic torch is lit, and it is carried by a sportsman from the host country.

The closing ceremony of the PG takes place after all sports events. Sportsmen come out together without national differences. Paralympic flag is lowered, the games are closed and the fire is put out. The PG represent extremely significant sports competition in the world, which is shown by the high number of sports disciplines and participants. There are Summer and Winter PG.

Taxonomy of competition disciplines on Summer Paralympic Games

The programme of Summer PG competition consists of 20 disciplines:

- athletics,
- · shooting,
- bowl (similar to bowling),
- cycling
- · equestrian sport,
- soccer 5 on 5,
- soccer 7 on 7,
- goalball,
- judo,
- · weight lifting,
- rowing,
- sailing,
- archery,
- table tennis,
- · volleyball,
- wheelchair basketball,
- · wheelchair fencing,
- wheelchair rugby,
- · wheelchair tennis.

Brief overview of scientific researches

In a prestigious world magazine Reynolds et al. (1994) published the work that refers to the achievements of Great Britain national team on the PG in Barcelona in 1992. British team consisted of 151 sportsmen and 54 sportswomen in 15 sports in total. They were supported by escort staff (86), including about 12 from medical team. The sportsmen were chosen from National championship from 5 organizations of persons with disabilities: British Wheelchair Sports Association, British Blind Sports, Athletes with Cerebral Palsy, British Amputee Sports Association and British Association of Other Sports. In this paper, the authors described organization and experience of medical team for support of sportsmen with disabilities. The results of the research showed that the injuries/illnesses of sportsmen were similar to the sport injuries of the healthy. British team took third place on the medal chart (40 gold, 47 silver and 41 bronze medals).

Webster et al. (2001) questioned the influence of sport and recreation on persons with limbs damage. They determined that the possibilities for persons with limb deficiency to participate in sports and recreational activities have considerably grown during the last 20 years. Different factors contributed to this phenomenon, including also growth of public interest in sport and fitness as well as improving con-

sciousness about disability. One of important factors is propaganda and the demand for growth in prosthetic technology and design. Advantages of participating in sport/recreation are numerous, whether it is a musical performance, friendly golfer circle, or high level competition. They are positively related to both an individual and the society. The aim of this paper was to give insight in the summary of development and the range of sport/recreational possibilities that are available to persons with limb deficiency.

Brittain (2001) tried, by introducing and explaining social aspects of disability, to move research focus further from medical approach. In thE paper he tried to observe the influence of social perception of disability and their influence on practicing sports for persons with disabilities at all levels. The author also saw the need for media coverage and to create and strengthen new views (approaches) to explaining disability phenomenon that are present within the medicine.



Picture 1. Wheelchair race

Hao et al. (2005) scientifically followed sportsmen in wheelchairs (Picture 1). They determined that the existing wheelchair races studies are not at the level of scientific research that would have practical effect. The authors think that in the future researchers should deal with the problem of energy metabolism space in wheelchair races more and more meticulously. The presentation and the results of observing physiological and biochemical sport indicators in this work result in the change of patterns and particular studies of training methods. The acquired results of the research best illustrate the way of training for wheelchair races, setting the system for monitoring and evaluation of criteria that are important to be adjusted to the demands of wheelchair race training. That way the authors came to the conclusion that the highest competition success can be achieved through

scientific monitoring of sportsmen preparation for wheelchair races.

Burkett (2010) in his research which deals with technology in paralympic sport tried to answer the question – whether it is more important to improve a skill or the thing which is important for performing the skill? Persons with disability often depend on orthopaedic aids in order to function in everyday activities as well as to participate in competitions. Technological development in sport can be in question. The aim of the work was to recognize and describe the existing technological advance of orthopaedic aids that are used in Summer PG and to carry out the debate about their improvement for the preparation for the next PG in London in 2012. The author made an overview of the reviewed literature and made his own observations on technological development in Athens PG (2004) and in Beijing (2008). The results of the research showed that the existing standards of orthopaedic aids can be a limiting factor of contestants' ability to perform difficult moving activities in their sports. Several unique technological alterations were made in prosthetics and devices on wheelchairs. Technology is important for Paralympics sportsmen and potential technological advantages of Paralympics sportsmen when competing against Olympic sportsmen are not clarified enough. The author concluded that the technology has to meet the demands of certain Paralympics sportsmen in order to achieve better results. The debate about possible increase in mechanical features of help devices must be observed holistically with compensating consequences that disability creates.

CRITICAL COMMENT

In order to properly carry out theoretic analysis method, it was necessary to logically adjust the gathered data about the phenomenon of Summer PG. By the review of available literature it was found that in relatively shorter time period of last half a century of the existence of the PG the development of this segment of sport is permanently present. Several factors among which we could name: consciousness about the importance for the development of paralympic personality, propaganda, technology of the development of artificial intelligence etc. influenced this ascending course of the PG development.

Still, it is noticed that there is a series of questions that are not solved. Why is the existing scientific/professional literature that deals with the problem of paralympic preparations for sports competitions minimally present related to the Olympic sportsmen? Is it because PG space is not valued enough as OG space? Is it because there are not enough humane people who would be included in Paralympics sport in various ways? Is it because it is not present enough in the media? Is it because of the state policy? Each of countless questions demands wider space for a serious debate and problem solving which would bring improvement.

Fundamental question of coaches' education was also discussed. Are there any specialist studies for paralympic sport? Are bio energetic abilities of paralympis sportsmen the same as that of Olympic sportsmen? Will the improvement of technology of artificial intelligence that is being used by paralympic sportsmen enable them to achieve better results than the Olympic sportsmen? Are the persons that are (not) with disability (going to be) better coaches of paralympic sportsmen?

The fact is that there are some questions and that every day this large number becomes even larger in the connection with PG phenomenon. But, on the other hand it is necessary to take them in consideration as soon as possible, because paralympic sportsmen want improvement. It would not be recommended to solve questions/dilemmas about some problem slowly and consequently to make them bigger. We think that no one is entitled or wants to influence the stagnation or degradation of the PG space.

It should be recognized that the main massage of Paralympic movement is that disability is not an obstacle in equal participation in the society, sport and goals achievement. Persons with disability are individuals with psycho physical imperfections (that they are born with or which they obtain in life). These imperfections disable them to form and realize themselves as fully accepted members of the society. They

are not sick persons that need to be treated, and they are neither healthy because they have psycho-physical imperfections. That is why Paralympics Movement has the goal to prove and show that people with different disabilities can equally participate in almost all sports disciplines.

New education programmes that have been present for 10 years now, include the programme of *Olympic education*, members of which are students, pupils that study about Paralympic sports, values, morals of games in human bonding, and joys of the PG. That way all the children in the world are educated and all accept values of both the OG and the PG.

CONCLUSION

Body exercises and sports competition are an inseparable part of the development of mankind. Along with the development of civilisation, sport grew into the game of human values. Throughout this development the ancient Olympic Games probably had the main role, held for almost 1,200 years. Thanks primarily to Pierre De Coubertin, the Olympic Games were renewed end raised to be an important world event. Together with them, half a century ago, the Paralympic Games were also introduced. They represent elite competition for sportsmen with different types of handicaps. The aim of paralympic movement is to, in a certain way, come as close as possible to the values of the Olympic movement. The Paralympic Games are important phenomenon in sport that is attracting more and more global attention. Still, it could be said that it is not enough yet and that much bigger involvement of the whole society is necessary to make progress in paralympic sport by humane actions. First of all it would refer to raising the quality of training conditions for the disabled sportsmen, as well as improving the staff, improving and modernisation of means that are being used.

REFERENCES

- 1. Brittain, I. (2001). Perceptions of Disability and their Impact upon Involvement in Sport for People with Disabilities at all Levels. *Archives of Physical Medicine and Rehabilitation*, 82(3), Supplement 1, S38-S44.
- 2. Burkett, B. (2010). Technology in Paralympic sport: performance enhancement or essential for performance? *Journal of Sports Medicine*, 44, 215-220.
- 3. Flander, M. (1975). Enciklopedija fizičke kulture (1-2) [Enciclopedia of Physical Culture (1-2)]. Zagreb: Jugoslavenski leksikografski zavod "Miroslav Krleža".
- 4. Hao, S., Jian-min, C., & De-ling, Z. (2005). Research Progress on the Scientific Monitoring of Wheelchair Racing Athletes. Beijing: Postgraduate Department, Beijing Sports University, 100084, China.
- 5. Reynolds, J., Stirk, A., Thomas, A., & Geary, F. (1994). Paralympics Barcelona 1992. *Journal of Sports Medicine*, 28, 14-17.
- 6. Webster, J.B., Levy, C.E., Bryant, P.R., & Prusakowski, P.E. (2001). Sports and recreation for persons with limb deficiency. *Archives of Physical Medicine and Rehabilitation*, 82(3), Supplement 1, S38-S44.

Received 1.11.2010. Accepted 9.12.2010.